

RECEIVED

JUN 06 2003

TECH CENTER 1600/2900

1600

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/766,889C

DATE: 06/03/2003

TIME: 10:11:47

Input Set : N:\CrF4\05222003\I766889B.raw

Output Set : N:\CRF4\06032003\I766889C.raw

```

1 <110> APPLICANT: Luiten, Rosalie
2      Boon-Falleur, Thierry
3      van der Bruggen, Pierre
4      Stroobant, Vincent
5      Demotte, Nathalie
6      Schultz, Erwin
7 <120> TITLE OF INVENTION: MAGE ANTIGENIC PEPTIDES WHICH BIND HLA-B35 AND HLA-B44
8 <130> FILE REFERENCE: L00461/70104
C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/766,889C
10 <141> CURRENT FILING DATE: 2001-01-19
11 <150> PRIOR APPLICATION NUMBER: US 60/177,242
12 <151> PRIOR FILING DATE: 2000-01-20
13 <150> PRIOR APPLICATION NUMBER: US 60/243,212
14 <151> PRIOR FILING DATE: 2000-10-25
15 <160> NUMBER OF SEQ ID NOS: 59
16 <170> SOFTWARE: PatentIn 3.1
17 <210> SEQ ID NO: 1
18 <211> LENGTH: 930
19 <212> TYPE: DNA
20 <213> ORGANISM: Homo sapiens
21 <400> SEQUENCE: 1
22      atgtctcttgg agcagaggag tctgcactgc aagcctgagg aagcccttga ggcaccaaca 60
23      gaggcccttg gctgtgtgtg tgtgcaggct gccacctctc cctcctctcc tctggtcctg 120
24      ggcacccttg aggaggtgcc cactgctggg tcaacagatc ctccccagag tcttcagcga 180
25      gcctccgctt tcccacttac catcaacttc actcgacaga ggcaaccacg tgagggttcc 240
26      agcagccgtg aagagggagg gccaaagcac tcttgatctc tggagtcctt gttccgagca 300
27      gtaatcacta agaaggtggc tgatttgggt ggttttctgc tctctaaata tcgagccagg 360
28      gagccagatc caaaggcgaga aatgctggag agtgtcatca aaaattacaa gcactgtttt 420
29      cctgagatct tcggcaaaag cctctgagtc ttgcagctgg tctttggcat tgacgtgaag 480
30      gaagcagacc ccaccggcca ctctatgtgc cttgtcacct gcctaggtct ctccatgatg 540
31      ggcctgctgg gtgataatca gatcatgccc aagacaggct tcttgataat tgtctctggt 600
32      atgattgcaa tggaggcgcg ccatgctcct gaggagaaaa tctgggagga gctgagtgtg 660
33      atggaggtgt atgatggag ggagcacagt gcctatgggg agcccaggaa gctgctcaac 720
34      caagatttgg tgcaggaaaa gtacctggag taccggcagg tgccggagac tgatccccga 780
35      cgtctagatg tctgtggggg tccaaggggc ctgctgaaaa caagctatgt gaaagtcctt 840
36      gagtatgtga tcaaggctcag tgcaagaagt cgcttttttc tcccatcctt gogtgaagca 900
37      gctttgagag aggaggaaga gggaggtctga
38
39 <210> SEQ ID NO: 2
40 <211> LENGTH: 309
41 <212> TYPE: PRT
42 <213> ORGANISM: Homo sapiens
43 <400> SEQUENCE: 2
44      Met Ser Leu Glu Gln Arg Ser Leu His Cys Lys Pro Glu Glu Ala Leu

```

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/766,889C

DATE: 06/03/2003  
 TIME: 10:11:47

Input Set : N:\Crf4\05222003\I766889B.raw  
 Output Set: N:\CRF4\06032003\I766889C.raw

```

46      1      5      10      15
47      Glu Ala Gln Gln Glu Ala Leu Gly Leu Val Cys Val Gln Ala Ala Thr
48      20      25      30
49      Ser Ser Ser Ser Pro Leu Val Leu Gly Thr Leu Glu Glu Val Pro Thr
50      35      40      45
51      Ala Gly Ser Thr Asp Pro Pro Gln Ser Pro Gln Gly Ala Ser Ala Phe
52      50      55      60
53      Pro Thr Thr Ile Asn Phe Thr Arg Gln Arg Gln Pro Ser Glu Gly Ser
54      65      70      75      80
55      Ser Ser Arg Glu Glu Glu Gly Pro Ser Thr Ser Cys Ile Leu Glu Ser
56      85      90      95
57      Leu Phe Arg Ala Val Ile Thr Lys Lys Val Ala Asp Leu Val Gly Phe
58      100      105      110
59      Leu Leu Leu Lys Tyr Arg Ala Arg Glu Pro Val Thr Lys Ala Glu Met
60      115      120      125
61      Leu Glu Ser Val Ile Lys Asn Tyr Lys His Cys Phe Pro Glu Ile Phe
62      130      135      140
63      Gly Lys Ala Ser Glu Ser Leu Gln Leu Val Phe Gly Ile Asp Val Lys
64      145      150      155      160
65      Glu Ala Asp Pro Thr Gly His Ser Tyr Val Leu Val Thr Cys Leu Gly
66      165      170      175
67      Leu Ser Tyr Asp Gly Leu Leu Gly Asp Asn Gln Ile Met Pro Lys Thr
68      180      185      190
69      Gly Phe Leu Ile Ile Val Leu Val Met Ile Ala Met Glu Gly Gly His
70      195      200      205
71      Ala Pro Glu Glu Glu Ile Trp Glu Glu Leu Ser Val Met Glu Val Tyr
72      210      215      220
73      Asp Gly Arg Glu His Ser Ala Tyr Gly Glu Pro Arg Lys Leu Leu Thr
74      225      230      235      240
75      Gln Asp Leu Val Gln Glu Lys Tyr Leu Glu Tyr Arg Gln Val Pro Asp
76      245      250      255
77      Ser Asp Pro Ala Arg Tyr Glu Phe Leu Trp Gly Pro Arg Ala Leu Ala
78      260      265      270
79      Glu Thr Ser Tyr Val Lys Val Leu Glu Tyr Val Ile Lys Val Ser Ala
80      275      280      285
81      Arg Val Arg Phe Phe Phe Pro Ser Leu Arg Glu Ala Ala Leu Arg Glu
82      290      295      300
83      Glu Glu Glu Gly Val
84      305
86 <210> SEQ ID NO: 3
87 <211> LENGTH: 31
88 <212> TYPE: DNA
89 <213> ORGANISM: Homo sapiens
90 <400> SEQUENCE: 3
91      aaactgcaga tgtctcttga gcagaggagt c
93 <210> SEQ ID NO: 4
94 <211> LENGTH: 30
95 <212> TYPE: DNA
96 <213> ORGANISM: Homo sapiens

```

31

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/766,889C

DATE: 06/03/2003

TIME: 10:11:47

Input Set : N:\Crf4\05222003\I766889B.raw

Output Set: N:\CRF4\06032003\I766889C.raw

```

97 <400> SEQUENCE: 4
98      aaactgcagt cagactccct ctctctctc
100 <210> SEQ ID NO: 5
101 <211> LENGTH: 12
102 <212> TYPE: PRT
103 <213> ORGANISM: Homo sapiens
104 <400> SEQUENCE: 5
105      Glu Ala Asp Pro Thr Gly His Ser Tyr Val Leu Val
106      1                      5                      10
108 <210> SEQ ID NO: 6
109 <211> LENGTH: 10
110 <212> TYPE: PRT
111 <213> ORGANISM: Homo sapiens
112 <400> SEQUENCE: 6
113      Asp Pro Thr Gly His Ser Tyr Val Leu Val
114      1                      5                      10
116 <210> SEQ ID NO: 7
117 <211> LENGTH: 9
118 <212> TYPE: PRT
119 <213> ORGANISM: Homo sapiens
120 <400> SEQUENCE: 7
121      Asp Pro Thr Gly His Ser Tyr Val Leu
122      1                      5
124 <210> SEQ ID NO: 8
125 <211> LENGTH: 9
126 <212> TYPE: PRT
127 <213> ORGANISM: Homo sapiens
128 <400> SEQUENCE: 8
129      Glu Ala Asp Pro Thr Gly His Ser Tyr
130      1                      5
132 <210> SEQ ID NO: 9
133 <211> LENGTH: 10
134 <212> TYPE: PRT
135 <213> ORGANISM: Homo sapiens
136 <400> SEQUENCE: 9
137      Lys Glu Ala Asp Pro Thr Gly His Ser Tyr
138      1                      5                      10
140 <210> SEQ ID NO: 10
141 <211> LENGTH: 8
142 <212> TYPE: PRT
143 <213> ORGANISM: Homo sapiens
144 <400> SEQUENCE: 10
145      Ala Asp Pro Thr Gly His Ser Tyr
146      1                      5
148 <210> SEQ ID NO: 11
149 <211> LENGTH: 72
150 <212> TYPE: DNA
151 <213> ORGANISM: Homo sapiens
152 <400> SEQUENCE: 11

```

30

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/766,889C

DATE: 06/03/2003

TIME: 10:11:47

Input Set : N:\Crf4\05222003\I766889B.raw

Output Set: N:\CRF4\06032003\I766889C.raw

```

153      atgtctgagt ccttgacgct ggtctttggc attgacgtga aggaagcaga cccacccggc      60
154      cactcctatt ga      72
156 <210> SEQ ID NO: 12
157 <211> LENGTH: 23
158 <212> TYPE: PRT
159 <213> ORGANISM: Homo sapiens
160 <400> SEQUENCE: 12
161      Met Ser Glu Ser Leu Gln Leu Val Phe Gly Ile Asp Val Lys Glu Ala
162      1      5      10      15
163      Asp Pro Thr Gly His Ser Tyr
164      20
166 <210> SEQ ID NO: 13
167 <211> LENGTH: 33
168 <212> TYPE: DNA
169 <213> ORGANISM: Homo sapiens
170 <400> SEQUENCE: 13
171      atggaagcag accccaccgg ccactcctat tga      33
173 <210> SEQ ID NO: 14
174 <211> LENGTH: 10
175 <212> TYPE: PRT
176 <213> ORGANISM: Homo sapiens
177 <400> SEQUENCE: 14
178      Met Glu Ala Asp Pro Thr Gly His Ser Tyr
179      1      5      10
181 <210> SEQ ID NO: 15
182 <211> LENGTH: 30
183 <212> TYPE: DNA
184 <213> ORGANISM: Homo sapiens
185 <400> SEQUENCE: 15
186      atggcagacc ccaccggcca ctctattga      30
188 <210> SEQ ID NO: 16
189 <211> LENGTH: 9
190 <212> TYPE: PRT
191 <213> ORGANISM: Homo sapiens
192 <400> SEQUENCE: 16
193      Met Ala Asp Pro Thr Gly His Ser Tyr
194      1      5
196 <210> SEQ ID NO: 17
197 <211> LENGTH: 9
198 <212> TYPE: PRT
199 <213> ORGANISM: Homo sapiens
200 <400> SEQUENCE: 17
201      Ser Ala Tyr Gly Glu Pro Arg Lys Leu
202      1      5
204 <210> SEQ ID NO: 18
205 <211> LENGTH: 9
206 <212> TYPE: PRT
207 <213> ORGANISM: Homo sapiens
208 <400> SEQUENCE: 18

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/766,889C

DATE: 06/03/2003

TIME: 10:11:47

Input Set : N:\CrF4\05222003\I766889B.raw

Output Set: N:\CRF4\06032003\I766889C.raw

```

209      Glu Val Asp Pro Ile Gly His Leu Tyr
210          1              5
212 <210> SEQ ID NO: 19
213 <211> LENGTH: 9
214 <212> TYPE: PRT
215 <213> ORGANISM: Homo sapiens
216 <400> SEQUENCE: 19
217      Phe Leu Trp Gly Pro Arg Ala Leu Val
218          1              5
220 <210> SEQ ID NO: 20
221 <211> LENGTH: 10
222 <212> TYPE: PRT
223 <213> ORGANISM: Homo sapiens
224 <400> SEQUENCE: 20
225      Met Glu Val Asp Pro Ile Gly His Leu Tyr
226          1              5              10
228 <210> SEQ ID NO: 21
229 <211> LENGTH: 9
230 <212> TYPE: PRT
231 <213> ORGANISM: Homo sapiens
232 <400> SEQUENCE: 21
233      Ala Ala Arg Ala Val Phe Leu Ala Leu
234          1              5
236 <210> SEQ ID NO: 22
237 <211> LENGTH: 8
238 <212> TYPE: PRT
239 <213> ORGANISM: Homo sapiens
240 <400> SEQUENCE: 22
241      Tyr Arg Pro Arg Pro Arg Arg Tyr
242          1              5
244 <210> SEQ ID NO: 23
245 <211> LENGTH: 10
246 <212> TYPE: PRT
247 <213> ORGANISM: Homo sapiens
248 <400> SEQUENCE: 23
249      Ser Pro Ser Ser Asn Arg Ile Arg Asn Thr
250          1              5              10
252 <210> SEQ ID NO: 24
253 <211> LENGTH: 9
254 <212> TYPE: PRT
255 <213> ORGANISM: Homo sapiens
256 <400> SEQUENCE: 24
257      Val Leu Pro Asp Val Phe Ile Arg Cys
258          1              5
260 <210> SEQ ID NO: 25
261 <211> LENGTH: 10
262 <212> TYPE: PRT
263 <213> ORGANISM: Homo sapiens
264 <400> SEQUENCE: 25

```

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/766,889C

DATE: 06/03/2003  
TIME: 10:11:48

Input Set : N:\Crf4\05222003\I766889B.raw  
Output Set: N:\CRF4\06032003\I766889C.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:53; Xaa Pos. 1

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 7,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38

Seq#:3; Line(s) 91

Seq#:4; Line(s) 98

Seq#:11; Line(s) 153,154

Seq#:13; Line(s) 171

Seq#:15; Line(s) 186

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/766,889C

DATE: 06/03/2003

TIME: 10:11:48

Input Set : N:\Crf4\05222003\I766889B.raw

Output Set: N:\CRF4\06032003\I766889C.raw

L:9 M:270 C: Current Application Number differs, Wrong Format

L:493 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53 after pos.:0